

IP Sharing Router



User Manual

Version 2.0

Date: Sep. 25, 2009

FCC Certifications



Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

CE Mark Warning



This equipment complies with the requirements relating to electromagnetic compatibility, EN 55022 class B for ITE, the essential protection requirement of Council Directive 2004/108/EC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

Company has an on-going policy of upgrading its products and it may be possible that information in this document is not up-to-date. Please check with your local distributors for the latest information. No part of this document can be copied or reproduced in any form without written consent from the company.

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Unpacking Information

Thank you for purchasing the product. Before you start, please check all the contents of this package.

The product package should include the following:

1. One IP Sharing Router
2. One Power Adapter
3. One resource CD, including: User's Manual

Note:

Make sure that the package contains the above items. If any of the listed items are damaged or missing, please contact with your distributor.

Conventions

The Router mentioned in this guide stands for IP Sharing Router without any explanation.

Chapter 1 Introduction

With the excellent circuit design and high quality production, we guarantee its high performance, great stability and easy to use.

This product is a complete plug-and-play solution. With standard Ethernet interface, it can be directly connected to any 10M/100M Ethernet devices, support Auto-MDI/MDIX.

1.1 General Description

High Performance

It provides the most cost-effective solution for IP sharing router. Among these Ethernet ports, four ports are used as LAN ports and one as WAN ports. Its hardware based IGMP snooping can support the real-time multimedia application without the intervention of CPU. The switch engine provides rich functions to meet the requirement of future applications,












Greater Range

With multiple functions, high-reliability, and high-security, it widely meets enterprise, organ, Internet cafe, broadband community, and school networks new and changing requirements. Additionally, it provides a friendly configuration interface for easy using and perfect setting up.

Strong Security Function

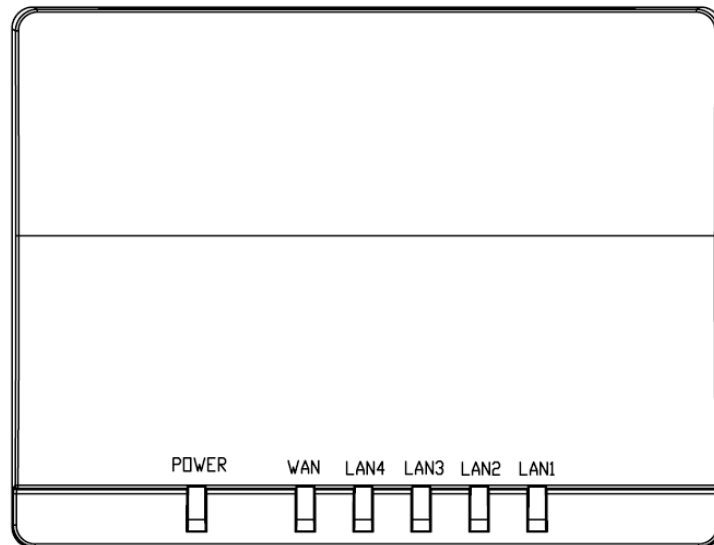
It features much more advanced security functions, such as NAT, Firewall. Moreover, it provides strong attack and defense function and supports internal and external attack precaution. It is especially effective in the prevention of DoS Attacks----ICMP Flood, UDP Flood, SYN Flood, Ping of Death, Land Attack etc.

1.2 Key Features

-  Provides 4*10/100 Mbps Ethernet port for LAN, 1*10/100 Mbps Ethernet port for WAN
-  Support 1K MAC addresses table
-  Support Auto MDI/MDIX
-  Provide 512 KB Flash, 2 MB SDRAM
-  UI Language provides English and Traditional Chinese.
-  WAN support Static IP, DHCP client, PPPoE, PPTP,L2TP, BigPond
-  Support Virtual Server, DMZ, DoS, UPnP, DDNS, QoS.
-  Support IP filter, MAC Filter, URL filter.
-  Support Static Routing, Dynamic Routing.
-  Support VPN Passthrough, Netmeeting Passthrough.
-  EMI Certification : FCC, CE, VCCI Class B

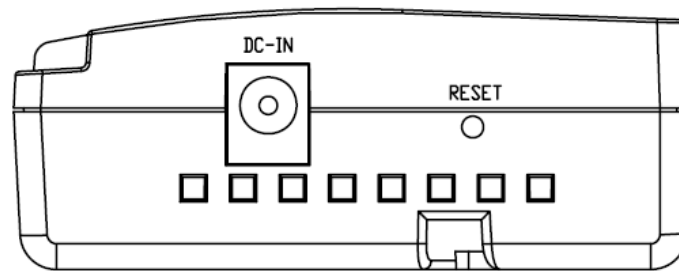
1.3 The Front Panel

The front panel of IP Sharing Router includes one power indicator and five function indicators, as explained in the following chart.



Name	Status	Indication
Power	On	Power On
	Off	Power Off
WAN / LAN (1~5)	Off	There is no device linked to the corresponding port or the connection is dropping off.
	On	There are devices linked to the corresponding ports but no data transmitted or received.
	Blinking	Sending or receiving data over corresponding port

1.4 The Right Panel



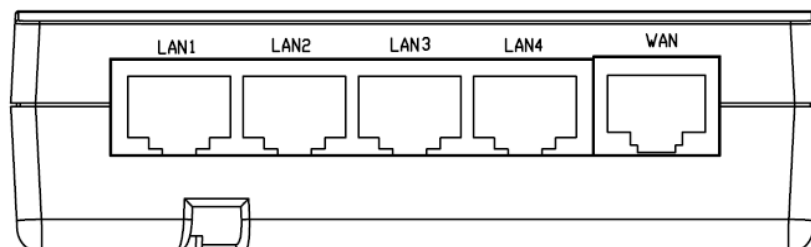
- **DC IN**

Plug the circle end of the power adapter firmly into the rear panel of the Router, and the other end put into an electric service outlet then the system is ready.

- **RESET**

Push the button for more than 5 seconds and then release it, the system will reset to factory default setting. In the meantime, system rewrites flash to default value. Approximately 15 seconds later, the whole system parameters have reset to factory default value. If the process has been interrupted by any reason (power off), the system will fail. Before performing the process, ensure a safe operating environment please!

1.5 The Rear Panel



- **LAN(1~4):** Through these ports, you can connect the Router to your PCs and the other Ethernet network devices.
- **WAN:** This WAN port is where you will connect the cable/DSL Modem, or Ethernet

1.6 Connecting this Router to your network

Before you install the router, you should connect your PC to the Internet through your broadband service successfully. If there is any problem, please contact with your ISP for help. After that, please install the router according to the following steps. Don't forget to pull out the power plug and keep your hands dry.

1. Connect the PC(s) and all Switched/Hubs on your LAN to the LAN Ports on the router.
2. Connect the DSL/Cable modem to the WAN port on the router.
3. Connect the AC power adapter to the AC power socket on the router, and the other end into an electrical outlet. The router will start to work automatically.
4. Power on your PC(s) and Cable/DSL modem.

Note:

Do not use this product near water, for example, in a wet basement or near a swimming pool. Avoid using this product during an electrical storm. There may be a remote risk of electric shock from lightning

1.7 Application Scenario



Chapter 2 Quick Installation Guide

After connecting the router into your network, you should configure it. This chapter describes how to configure the basic functions of your router. These procedures only take you a few minutes. You can access the internet via the router immediately after it has been successfully configured.

2.1 Configure PC

In order to communicate with this Router, you have to configure the IP addresses of your computer to make it compatible with the device.

Note: The router supports DHCP server and it is enabled as default. Users that configure your IP address as “**Obtain an IP address automatically**” may skip the following IP configuration instruction.

The default network setting of the device:

IP address: 192.168.1.1

Subnet Mask: 255.255.255.0

DHCP Server: enable

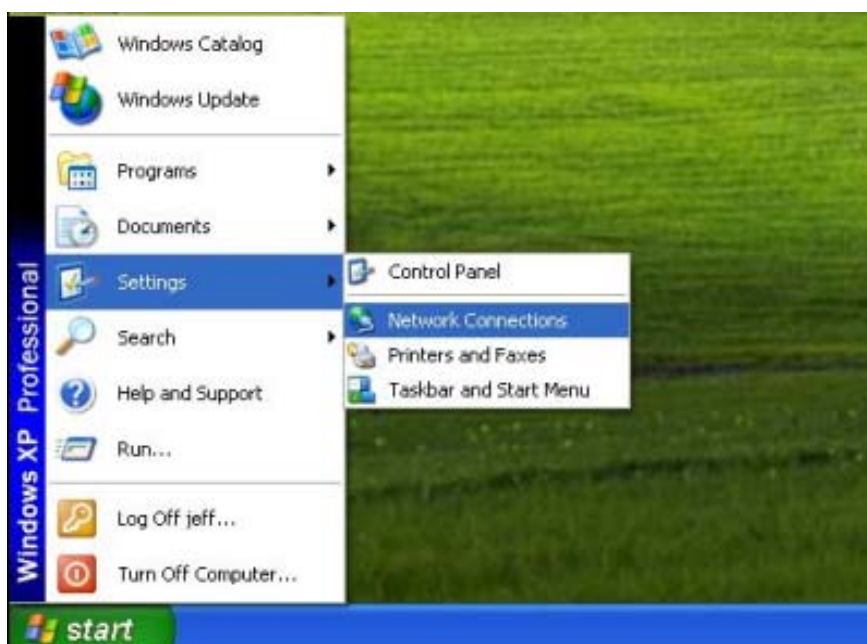
In the following configuration guide, the IP address “192.168.1.2” is assumed to be your IP address if you want to specify IP addresses manually. Please DO NOT choose “192.168.1.1” as the IP address. For the IP address “192.168.1.1” has been set as the default IP for this device.

The following configuration guide uses windows XP as the presumed operation system.

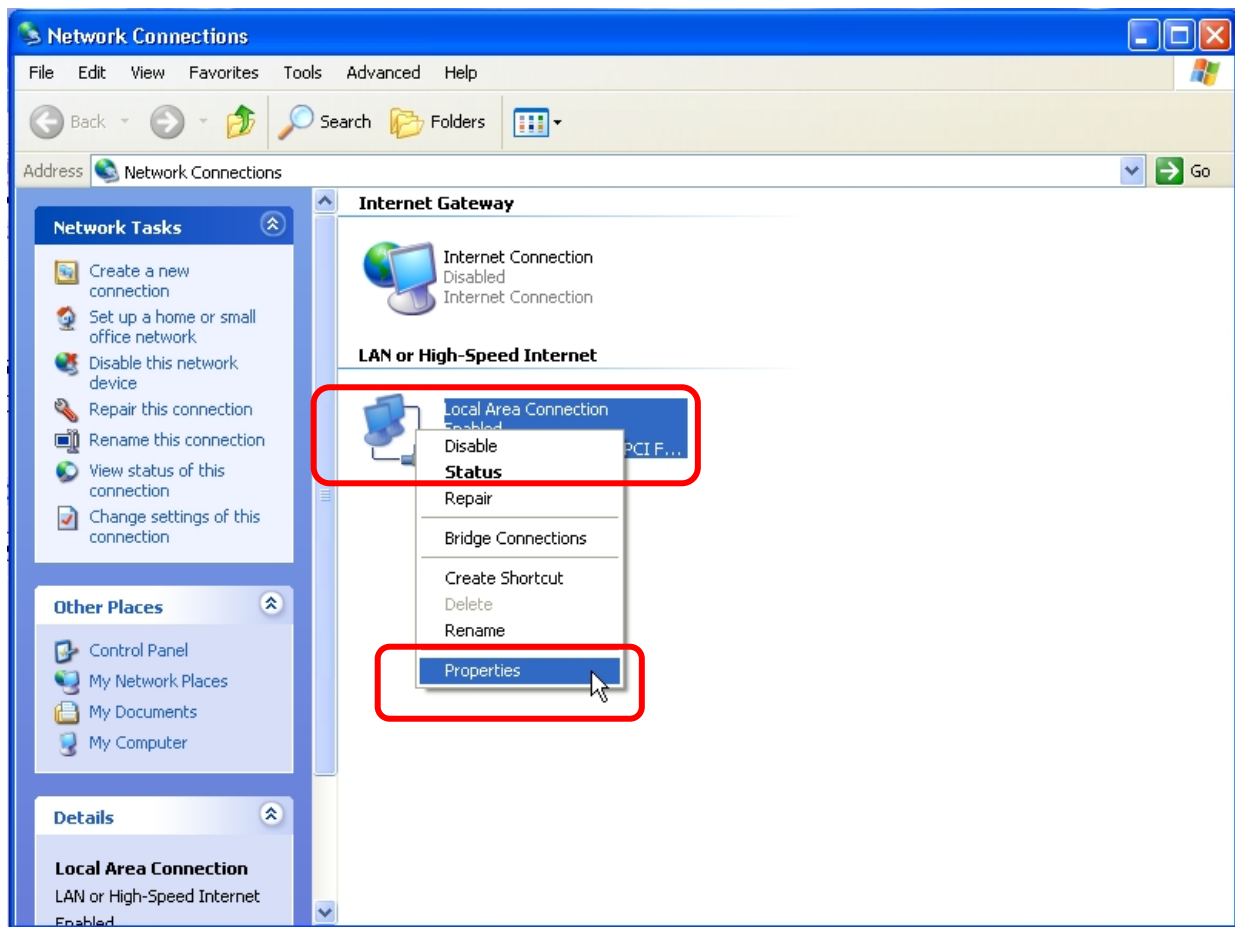
Procedures to configure IP addresses for your computer

1. If you are in Classic Start menu view, click **Start > Settings > Network Connections**.

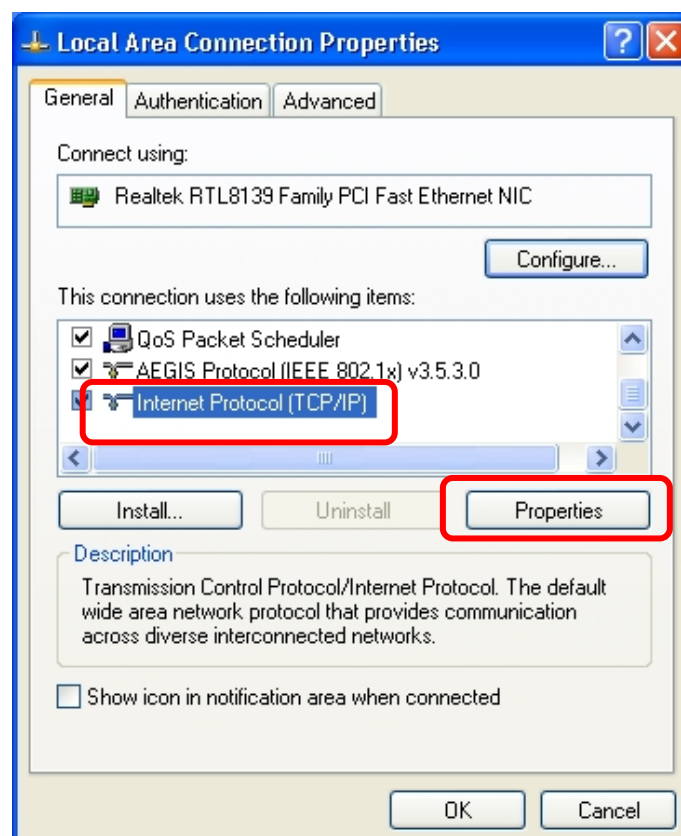
If you are in Start menu view, click **Start > Control Panel > Network Connections**.



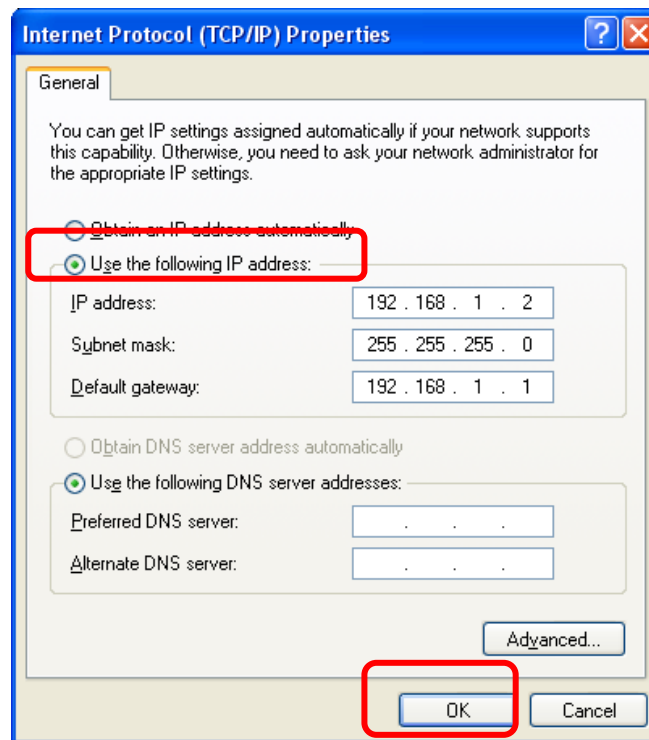
2. Right-click on **Local Area Connection** item and click on **Properties**.



3. Choose **Internet Protocol (TCP/IP)** and click **Properties**.



4. You may choose “Obtain an IP address automatically” (recommend) to get IP address automatically or choose “Use the following IP address” to specify IP addresses manually. Please click the OK button after your configuration.



Note:

You can configure the PC to get an IP address manually, select “Obtain an IP address automatically” and “Obtain DNS server address automatically” in the screen above, For Windows 98 OS or earlier, the PC and router may need to be restarted,

Now, you can run the Ping command in the command prompt to verify the network connection. Please click the **Start** menu on your desktop. Select **run** tab, type **cmd** in the field, and then type ping 192.168.1.1 on the next screen, and then press **Enter**.

If the result displayed is similar to the screen below, the connection between your PC and the Router has been established.

```
C:\Documents and Settings\user>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

If the result displayed is similar to the screen shown below, it means that your PC has not connected to the Router.

```
C:\Documents and Settings\Administrator>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

You can click it follow the steps below:

Note:

Is the connection between your PC and the Router correct?

The LEDs of LAN port which you link to the device and the LEDs on your PC's adapter should be lit.

Is the TCP/IP configuration for your PC correct?

If the Router's IP address is 192.168.1.1., you PC's IP address must be within the range of 192.168.1.2~192.168.1.254, the gateway must be 192.168.1.1.

2.2 Login

Once your host PC is properly configured, please proceed as follows to use the Web-based Utility:

1. Open the Internet WEB browser.
2. Type **192.168.1.1** into the URL WEB address location and press Enter.
3. The Login window appears.
 - Enter **admin** in the User Name location (default value).
 - Enter **admin** in the Password location (default value).
 - Click **OK** button.



Finally, you access to the **Quick Setup** screen, then please follow the steps below to complete the Quick Setup.

2.3 Quick Setup

Select the **Quick Setup** tab on the middle of the main menu and the “Wizard” screen will appear.

1. Host Settings

The screenshot shows the 'IP Sharing Router' interface with the 'Quick Setup' tab selected. Below the main menu, the 'Wizard' section is active, displaying the 'HOST Settings' form. The form includes fields for 'Host Name' (set to 'router'), 'Time Zone' (set to '(GMT+08:00) Hong Kong, Perth, Singapore, Taipei'), and 'Daylight Saving' (set to 'Enabled' with a date range from 'FEB 2' to 'FEB 2'). A 'Next' button is at the bottom of the form. To the right, a 'Help' section contains a 'HELP' link and the text 'See manual for detail.'.

Enter the host name, select “Time Zone / Daylight Saving”, then click “Next” button

2. WAN Mode

Specify the WAN connection type required by your ISP, please select your WAN connection “**Auto Detect** / **Manual Select**”

(1) Auto Detect

In this mode, you may only click “Detect” to get the detect result.

The screenshot shows the 'WAN Mode' section of the wizard. It contains a message: 'Specify the WAN connection type required by your Internet Service Provider. Please select your WAN connection from the following:'. Below this, there are two radio buttons: 'Auto Detect' (selected) and 'Manual Select'. At the bottom, there is an 'Auto detect result' field showing 'Abnormal', a 'Detect' button, and 'Back' and 'Next' buttons.

(2) Manual Select

In this mode, the router supports six popular ways to connect to Internet. Please select one compatible with your ISP.

WAN Mode

Specify the WAN connection type required by your Internet Service Provider. Please select your WAN connection from the following:

☐ Auto Detect ☒ Manual Select

☒ Dynamic IP Address
☐ Static IP
☐ PPPOE
☐ PPTP
☐ L2TP
☐ BigPond

[Back](#) [Next](#)

A. If you choose “**Dynamic IP Address**”, the router will automatically receive the IP parameters from your ISP without needing to enter any parameters. You will see the screen as the below, select the checkbox of MAC Address

DHCP Mode

MAC Cloning ☒ MAC Address

Clone MAC: [Clone MAC](#)

[Back](#) [Next](#)

B. If you choose “**WAN Static IP**”, you should enter the detailed IP information. Click the “**Next**” button

WAN Static IP

IP Address

Subnet Mask

Gateway IP

[Back](#) [Next](#)

C. If you choose “**PPPoE**”, you will see the screen as the following figure, enter the “User Name & Password & Retype password & Service Name & MTU & Maximum Idle Time”, and then click the “**Next**”

PPPOE Mode

User Name

Password

Retype password

Service Name

MTU (546-1492)

Maximum Idle Time (60-3600) seconds (0: No timeout)

[Back](#) [Next](#)

D. If you choose “**PPTP**”, you will see the screen as the following figure, enter the “PPTP Account & PPTP Password & Retype password & Service IP Address & IP Address & Subnet Mask & Gateway & MTU & Maximum Idle Time”, and then click the “**Next**”

PPTP Mode

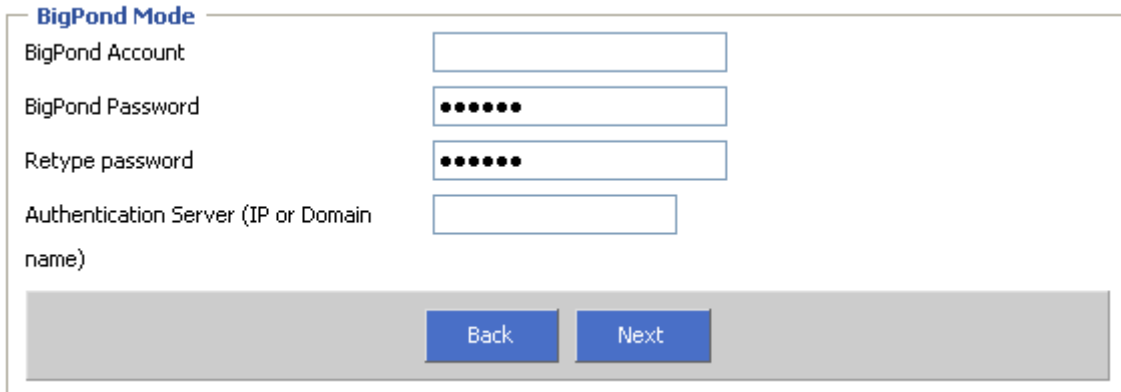
PPTP Account	<input type="text"/>
PPTP Password	<input type="password"/>
Retype password	<input type="password"/>
Service IP Address (IP or Domain name)	<input type="text" value="0.0.0.0"/>
IP Address	<input type="text" value="0.0.0.0"/>
Subnet Mask	<input type="text" value="255.255.255.0"/>
Gateway	<input type="text" value="0.0.0.0"/>
MTU (546-1460)	<input type="text" value="1460"/>
Maximum Idle Time (60-3600)	<input type="text" value="300"/> seconds (0: No timeout)

E. If you choose “**L2TP**”, you will see the screen as the following figure, enter the “L2TP Account & L2TP Password & Retype password & Service IP Address & IP Address & Subnet Mask & Gateway & MTU & Maximum Idle Time”, and then click the “**Next**”

L2TP Mode

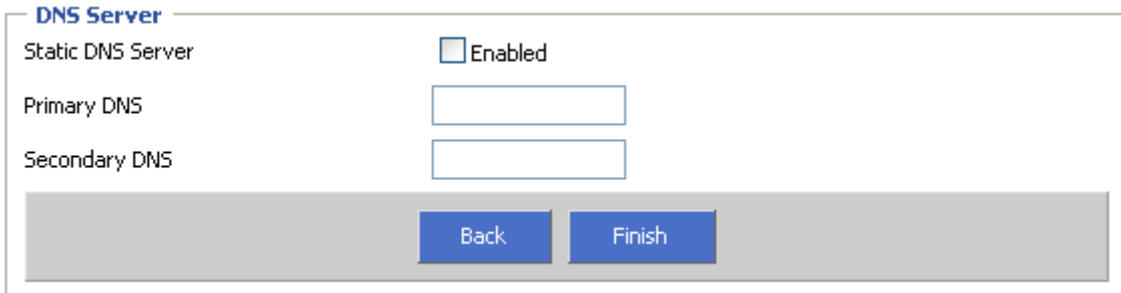
L2TP Account	<input type="text"/>
L2TP Password	<input type="password"/>
Retype password	<input type="password"/>
Service IP Address (IP or Domain name)	<input type="text" value="0.0.0.0"/>
IP Address	<input type="text" value="0.0.0.0"/>
Subnet Mask	<input type="text" value="255.255.255.0"/>
Gateway	<input type="text" value="0.0.0.0"/>
MTU (546-1460)	<input type="text" value="1460"/>
Maximum Idle Time (60-3600)	<input type="text" value="300"/> seconds (0: No timeout)

F. If you choose “**BigPond**”, you will see the screen as the following figure, enter the “BigPond Account & BigPond Password & Retype password & Authentication Server”, and then click the “**Next**”



The image shows a web interface titled "BigPond Mode". It contains four input fields: "BigPond Account" (a text box), "BigPond Password" (a password box with dots), "Retype password" (a password box with dots), and "Authentication Server (IP or Domain name)" (a text box). At the bottom, there are two blue buttons: "Back" and "Next".

(3) DNS Server



The image shows a web interface titled "DNS Server". It contains three input fields: "Static DNS Server" (a checkbox labeled "Enabled"), "Primary DNS" (a text box), and "Secondary DNS" (a text box). At the bottom, there are two blue buttons: "Back" and "Finish".

If your ISP gives you one or two DNS address, enter the primary and secondary addresses into the correct fields. Otherwise, the DNS servers will be assigned dynamically from ISP.

Click **Finish** to complete the quick installation.

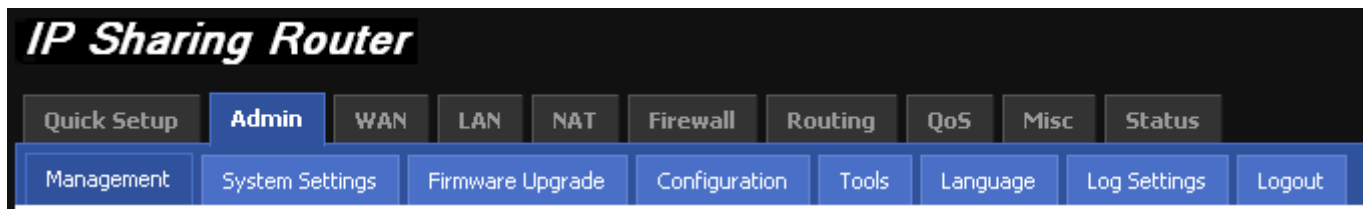
Chapter 3 Configuring the Router

This User Guide recommends using the “Quick Installation Guide” for first-time installation. For advanced users, if you want to know more about this device and make use of its functions adequately, you need to read this chapter and configure advanced settings through the Web-based Utility.

After your successful login, you can configure and manage the router. There are main menus on the middle of the Web-based Utility. Submenus will be available after you click one of the main menus. On the center of the Web-based Utility, you can configure the function. Besides this, you can refer to the help on the right of Web-based Utility. To apply any settings you have altered on the page, please click the **OK** button.

3.1 Admin

Click menu “**Admin**”, you can see the submenus under the main menu.



3.1.1 Management

In this page, you can change the factory default user name and password of the router in the next screen. After configuration, click the “**OK**”

Login Account

User Name

Current Password

New Password

Re-type Password

Idle Time Out (60-3600)
 seconds (0: No timeout)

Remote Management

Enabled
☐

IP Address

Port

Note:

- (1) It is strongly recommended that you change the factory user name and password of the router. All users who try to access the router's web-based utility will be prompted for the router's user name and password.
- (2) The new user and password must not include any spaces. Enter the new password twice to confirm it.

Remote Management	
Enabled	Select this button to configure the Remote Management function. This feature allows you to manage your Router from a remote location via the Internet.
IP Address	This is the current address of PC you use when accessing your router from the Internet. The default IP address is 0.0.0.0. It means this function is disabled. To enable this function, change the default IP address to another IP address as desired.
Port	The router's default remote management port number is 8080. For greater security, you can change the remote management web interface to a custom port by entering that number in the box provided.

3.1.2 System Settings

Choose menu “**Admin—System Settings**”, you can configure the time on the screen.

Time

NTP Server (IP or Domain name) (Optional)

Time Zone

Daylight Saving ☐ Enabled From to

Name

Host Name

Operating Mode

NAPT ☒ Enabled

Time	
NTP Server	Enter the address of the preferred NTP server.
Time Zone	Select your local time zone from this pull down list.
Daylight Saving	Select the date range from this pull down list.
Name	
Host Name	Enter the name of the Router.

3.1.3 Firmware Upgrade

You can upgrade the firmware of the device using this tool. Make sure that the firmware you want to use is saved on the local hard drive of the computer. Click on **Browse** to search the local hard drive for the firmware to be used for the update.



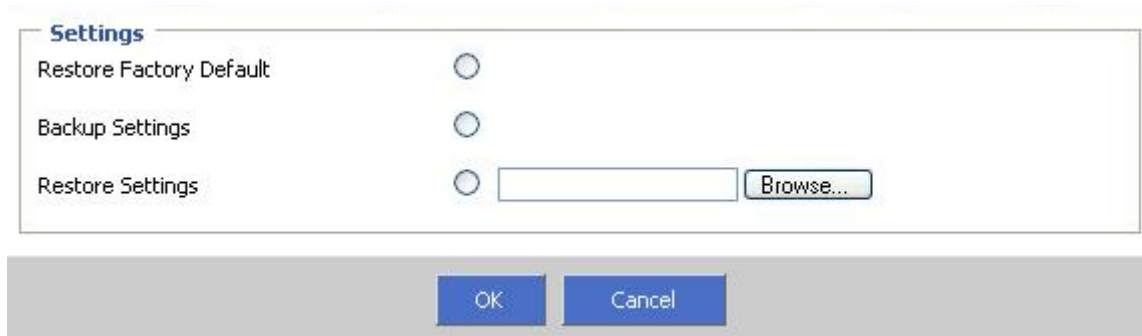
Firmware Upgrade

Current Firmware Version: 1.0.0
Firmware Date: #13 Tue Sep 22 14:33:54 2009

Enter the path and name of the upgrade file then click the OK button below.

3.1.4 Configuration

Choose menu "**Configuration**", you can restore the configurations of the Router to factory defaults on the screen.



Settings

Restore Factory Default ☐

Backup Settings ☐

Restore Settings ☐

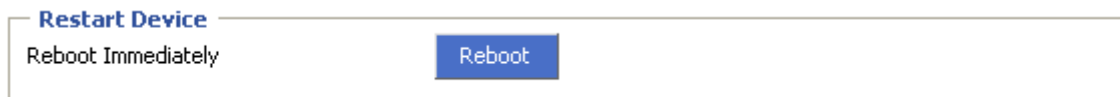
Reset default: System configuration is reset to the factory default settings. Default settings are: "Username: admin", "Password: admin", "IP: 192.168.1.1", "Net mask: 255.255.255.0"

Backup Settings: Select the radio button, you can save the current configuration of the Router as a backup file and restore the configuration via a backup file.

Restore Settings: Select the radio button, then click the **Browse** button to locate the update file for the device, or enter the exact path to the Setting file in text box.

3.1.5 Tools

If for any reason the device is not responding correctly, you may want to restart the unit by clicking on the **Reboot** button.

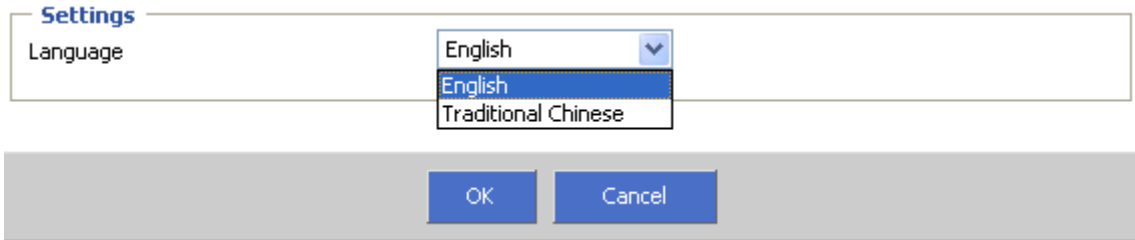


Restart Device

Reboot Immediately

3.1.6 Language

Specify the language of the device menu. It supports two languages: English, Traditional Chinese.



The screenshot shows a 'Settings' dialog box with the title 'Settings'. Inside, there is a label 'Language' followed by a dropdown menu. The dropdown menu is open, showing 'English' as the selected option, with 'English' and 'Traditional Chinese' as available choices. Below the dropdown, there are two buttons: 'OK' and 'Cancel'.

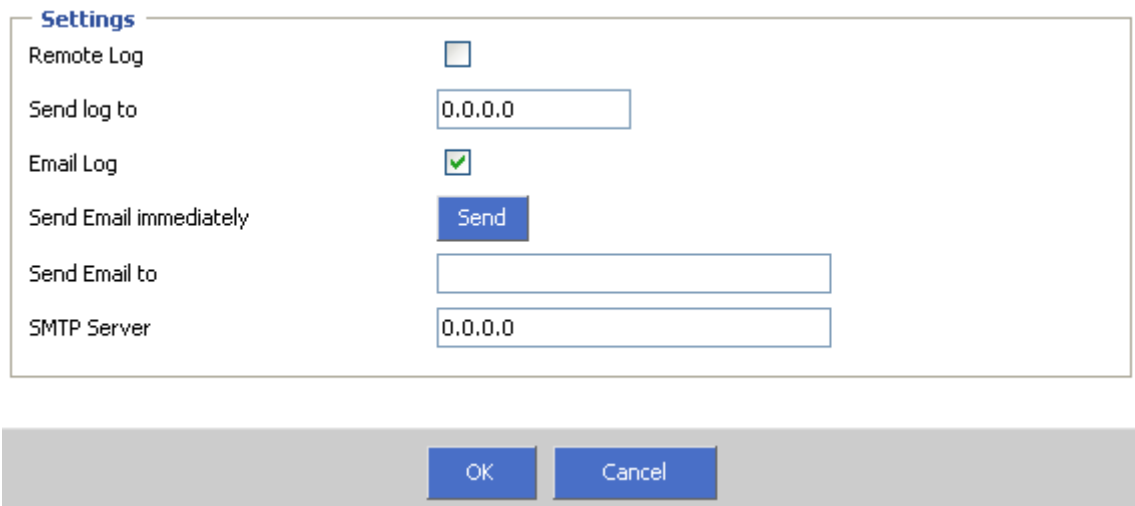
3.1.7 Log Settings

Not only does the device display the logs of activities and events, it can be setup to send these logs to another location. The logs can be sent via email to a specific email account.

Remote Log: Select the button to enable **Remote Log**, and type the IP address of your PC, thus, if your computer is running to Log Server, you will receive the log information real-in-time once the router has activities.

Send Email to: Enter the email address the logs will be sent to. Select **Email Log** and click on “**Send**” to send the email.

SMTP Server: Enter the address of the SMTP (Simple Mail Transfer Protocol) server that will be used to send the logs.



The screenshot shows a 'Settings' dialog box with the title 'Settings'. Inside, there are several settings: 'Remote Log' with an unchecked checkbox, 'Send log to' with a text field containing '0.0.0.0', 'Email Log' with a checked checkbox, 'Send Email immediately' with a 'Send' button, 'Send Email to' with an empty text field, and 'SMTP Server' with a text field containing '0.0.0.0'. Below the settings, there are two buttons: 'OK' and 'Cancel'.

3.1.8 Logout

Logout Account, need to re-type your account and password!!



3.2 WAN

The Router provides six connection types for WAN to connect to the Internet, they are “Dynamic IP Address”, “Static IP”, “PPPoE”, “PPTP”, “L2TP”, and “BigPond”. For configuring the WAN, you should select the connection type firstly according your needs.

WAN Connection Mode

☐ Dynamic IP Address Obtain an IP address automatically from your service provider.

☒ Static IP Use a static IP address. Your service provider gives a static IP address to access Internet services.

☐ PPPOE PPP over Ethernet is a common connection method used for xDSL

☐ PPTP PPP Tunneling Protocol can support multi-protocol Virtual Private Networks (VPN).

☐ L2TP Layer 2 Tunneling Protocol can support multi-protocol Virtual Private Networks (VPN).

☐ BigPond Australia ISP service

1. Dynamic IP Address

If you aren't given any login parameters and IP information, please select Dynamic IP, then the router will automatically get IP parameters from your ISP. Click the **OK** button to save the IP parameters.

Dynamic IP Address

Request IP address

 MTU(576-1500)

 Static DNS Server ☐

 Primary DNS

 Secondary DNS (Optional)

 MAC Cloning ☒ Enabled

 MAC Address (XX:XX:XX:XX:XX:XX)

Dynamic IP Address	
Request IP Address	Enter the IP address of the request.
MTU	The normal MTU (Maximum Transmission Unit) value for most Ethernet networks is 1500 Bytes. For some ISPs you need to reduce the MTU. But this is rarely required, and should not be done unless you are sure it is necessary for your ISP connection.
Static DNS Server	Select it or not to configure this parameter.
Primary DNS &	If your ISP gives you one or two DNS address, enter the primary and

Secondary DNS	secondary addresses into the correct fields. Otherwise, the DNS servers will be assigned dynamically from ISP.
MAC Cloning	Select it or not to configure this parameter.
MAC Address	This field displays the MAC address of the PC that is managing the router. If the MAC address is required, you can click the Clone MAC button to copy the MAC address of the Ethernet Card and replace the WAN MAC address with this MAC address..

2. Static IP Mode

If your Internet connection requires a static IP address, then your ISP will provide you with a Static IP Address and Subnet Mask.

WAN Static IP

Static IP Address

IP Address

192.168.1.2

Subnet Mask

255.255.255.0

Gateway IP

192.168.1.1

MTU (576-1500)

1500

Static DNS Server

☒

Primary DNS

Secondary DNS

(Optional)

MAC Cloning

☒ Enabled

MAC Address (XX:XX:XX:XX:XX:XX)

00:0E:A6:03:0D:44

Clone MAC

More IP addresses

Does ISP provide more IP addresses?

☐

OK

Cancel

WAN Static IP	
IP Address	Enter the IP address in dotted-decimal notation provided by your ISP.
Subnet Mask	Enter the subnet Mask in dotted-decimal notation provided by your ISP, usually is 255.255.255.0
Gateway IP	Enter the gateway IP Address in dotted-decimal notation provided by your ISP
MTU	The normal MTU (Maximum Transmission Unit) value for most Ethernet networks is 1500 Bytes. For some ISPs you need to reduce the MTU. But this is rarely required, and should not be done unless you are sure it is necessary for your ISP connection.

Primary DNS	Type the DNS address in dotted-decimal notation provided by your ISP.
Secondary DNS	Type another DNS address in dotted-decimal notation provided by your ISP if provided(Optional)
MAC Cloning	Select it or not to configure this parameter.
MAC Address	This field displays the MAC address of the PC that is managing the router. If the MAC address is required, you can click the Clone MAC button to copy the MAC address of the Ethernet Card and replace the WAN MAC address with this MAC address.

3. PPPoE

If you are given a user name and a password, please select PPPoE. If you are not sure which connection type you use currently, please contact your ISP to obtain the correct information.

PPPOE

PPPOE Account	<input type="text" value="admin"/>
PPPOE Password	<input type="password" value="••••••"/>
Please retype your password	<input type="password" value="••••••"/>
Service Name	<input type="text"/>
MTU (546-1492)	<input type="text" value="1492"/>
Maximum Idle Time (60-3600)	<input type="text" value="300"/> seconds (0: No timeout)
Connection Mode	<input type="text" value="keep-alive"/> ▼
Static DNS Server	<input type="checkbox"/>
Primary DNS	<input type="text"/>
Secondary DNS	<input type="text"/> (Optional)
MAC Cloning	<input checked="" type="checkbox"/> Enabled
MAC Address (XX:XX:XX:XX:XX:XX)	<input type="text" value="00:0E:A6:03:0D:44"/> <input type="button" value="Clone MAC"/>

PPPoE	
PPPOE Account & PPPOE Password & Please retype your password	Enter the Account and Password provided by your ISP. These fields are case-sensitive.
Service Name	The service name should not be configured unless you are sure it is necessary for your ISP.

MTU	The default MTU size is 1492 bytes, which is usually fine. For some ISPs you need to reduce the MTU. This should not be done unless you are sure it is necessary for your ISP connection.
Maximum Idle Time	Enter the a specified period of the Internet connectivity
Connection Mode	<p>There are three modes: keep-alive; auto-connect; Manual-on</p> <p>Keep-alive: you can configure the router to disconnect your Internet connection after a specified period of the Internet connectivity (Max Idle Time). If your Internet connection has been terminated due to inactivity, Keep-alive enables the router to automatically re-establish your connection as soon as you attempt to access the Internet again.</p> <p>Auto-connect: Connect automatically after the router is disconnected.</p> <p>Manual-on: You can configure the router to make it connect or disconnect manually. After a specified period of inactivity (Max Idle Time), the router will disconnect your Internet connection, and not be able to re-establish your connection automatically as soon as you attempt to access the Internet again.</p>
Static DNS Server	Select it or not to configure this parameter.
Primary DNS & Secondary DNS	If you know that your ISP does not automatically transmit DNS addresses to the router during login, enter the address in dotted-decimal notation of your ISP's primary DNS server. If a secondary DNS server address is available, enter it as well.
MAC Cloning	Select it or not to configure this parameter.
MAC Address	This field displays the MAC address of the PC that is managing the router. If the MAC address is required, you can click the Clone MAC button to copy the MAC address of the Ethernet Card and replace the WAN MAC address with this MAC address.

4. PPTP Mode

The Point-to-Point Tunneling Protocol (PPTP) is a method for implementing virtual private networks.

WAN PPTP

WAN Interface Settings

WAN Interface IP

Static IP

IP Address

0.0.0.0

Subnet Mask

255.255.255.0

Gateway

0.0.0.0

Static DNS Server

☐

Primary DNS

Secondary DNS

(Optional)

MAC Cloning

☒ Enabled

MAC Address (XX:XX:XX:XX:XX:XX)

00:0E:A6:03:0D:44

Clone MAC

PPTP Settings

PPTP Account

PPTP Password

••••••

Please retype your password

••••••

PPTP Server (IP or Domain name)

0.0.0.0

Connection ID

(Optional)

MTU (546-1460)

1460

Maximum Idle Time (60-3600)

300

seconds (0: No timeout)

Connection Mode

keep-alive

MPPE

☐

WAN Interface Settings	
WAN Interface IP	At this parameter, you can choose “Static IP” or “Dynamic IP” in the drop list.
Static DNS Server	Select it or not to configure this parameter.
Primary DNS	Type the DNS address in dotted-decimal notation provided by your ISP.
Secondary DNS	Type another DNS address in dotted-decimal notation provided by your ISP if provided(Optional)
MAC Cloning	Select it or not to configure this parameter.
MAC Address	This field displays the MAC address of the PC that is managing the router. If the MAC address is required, you can click the Clone MAC button to copy the MAC address of the Ethernet Card and replace the WAN MAC address with this MAC address..

PPTP Settings	
PPTP Account & PPTP Password & Please retype your password	Enter the Account and Password provided by your ISP. These fields are case-sensitive.
PPTP Server	Specify IP Address or domain name of the PPTP Server.
Connection ID	It is the option. Enter the connection ID or not.
MTU	The default MTU size is 1460 bytes, which is usually fine. For some ISPs you need to modify the MTU. This should not be done unless you are sure it is necessary for your ISP connection.
Maximum Idle Time	Enter the a specified period of the Internet connectivity
Connection Mode	<p>There are three modes: keep-alive; auto-connect; Manual-on</p> <p>Keep-alive: you can configure the router to disconnect your Internet connection after a specified period of the Internet connectivity(Max Idle Time). If your Internet connection has been terminated due to inactivity, Keep-alive enables the router to automatically re-establish your connection as soon as you attempt to access the Internet again.</p> <p>Auto-connect: Connect automatically after the router is disconnected.</p> <p>Manual-on: You can configure the router to make it connect or disconnect manually. After a specified period of inactivity (Max Idle Time), the router will disconnect your Internet connection, and not be able to re-establish your connection automatically as soon as you attempt to access the Internet again.</p>
MPPE	It is stipulated one protection of confidential communication mechanism in the data link layer. Select it or not to configure this parameter.

5. L2TP Mode

The Layer Two Tunneling Protocol (L2TP) is a method for implementing virtual private networks.

WAN L2TP

WAN Interface Settings

WAN Interface IP

Static IP

IP Address

0.0.0.0

Subnet Mask

255.255.255.0

Gateway

0.0.0.0

Static DNS Server

☐

Primary DNS

Secondary DNS

(Optional)

MAC Cloning

☒ Enabled

MAC Address (XX:XX:XX:XX:XX:XX)

00:0E:A6:03:0D:44

Clone MAC

L2TP Settings

L2TP Account

L2TP Password

••••••

Please retype your password

••••••

L2TP Server (IP or Domain name)

0.0.0.0

MTU (546-1460)

1460

Maximum Idle Time (60-3600)

300

seconds (0: No timeout)

Connection Mode

keep-alive

OK

Cancel

WAN Interface Settings	
WAN Interface IP	At this parameter, you can choose “Static IP” or “Dynamic IP” in the drop list.
Static DNS Server	Select it or not to configure this parameter.
Primary DNS	Type the DNS address in dotted-decimal notation provided by your ISP.
Secondary DNS	Type another DNS address in dotted-decimal notation provided by your ISP if provided(Optional)
MAC Cloning	Select it or not to configure this parameter.
MAC Address	This field displays the MAC address of the PC that is managing the router. If the MAC address is required, you can click the Clone MAC button to copy the MAC address of the Ethernet Card and replace the WAN MAC address with this MAC address..

L2TP Settings	
L2TP Account & L2TP Password & Please retype your password	Enter the Account and Password provided by your ISP. These fields are case-sensitive.
L2TP Server	Specify IP Address or dynamic name of the L2TP Server.
MTU	The default MTU size is 1460 bytes, which is usually fine. For some ISPs you need to modify the MTU. This should not be done unless you are sure it is necessary for your ISP connection.
Maximum Idle Time	Enter a specified period of the Internet connectivity
Connection Mode	<p>There are three modes: keep-alive; auto-connect; Manual-on</p> <p>Keep-alive: you can configure the router to disconnect your Internet connection after a specified period of the Internet connectivity (Max Idle Time). If your Internet connection has been terminated due to inactivity, Keep-alive enables the router to automatically re-establish your connection as soon as you attempt to access the Internet again.</p> <p>Auto-connect: Connect automatically after the router is disconnected.</p> <p>Manual-on: You can configure the router to make it connect or disconnect manually. After a specified period of inactivity (Max Idle Time), the router will disconnect your Internet connection, and not be able to re-establish your connection automatically as soon as you attempt to access the Internet again.</p>

6. BigPond

If your ISP provides BigPond Cable connection, please select BigPond option

BigPond

BigPond Account

BigPond Password

Please retype your password

••••••

BigPond Server (IP or Domain name)

Request IP address

MTU (576-1500)

1500

Static DNS Server

☐

Primary DNS

Secondary DNS

(Optional)

MAC Cloning

☒ Enabled

MAC Address (XX:XX:XX:XX:XX:XX)

00:0E:A6:03:0D:44

Clone MAC

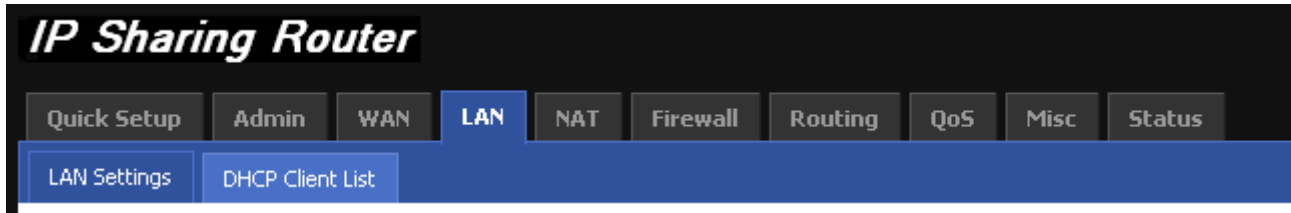
OK

Cancel

BigPond	
BigPond Account & BigPond Password & Please retype your password	Enter the Account and Password provided by your ISP. These fields are case-sensitive.
BigPond Server	Specify IP Address or domain name of the BigPond Server.
Request IP address	Enter the IP address for the request
MTU	The normal MTU (Maximum Transmission Unit) value for most Ethernet networks is 1500 Bytes. For some ISPs you need to reduce the MTU. But this is rarely required, and should not be done unless you are sure it is necessary for your ISP connection.
Static DNS Server	Select it or not to configure this parameter.
Primary DNS	Type the DNS address in dotted-decimal notation provided by your ISP.
Secondary DNS	Type another DNS address in dotted-decimal notation provided by your ISP if provided(Optional)
MAC Cloning	Select it or not to configure this parameter.
MAC Address	This field displays the MAC address of the PC that is managing the router. If the MAC address is required, you can click the Clone MAC button to copy the MAC address of the Ethernet Card and replace the WAN MAC address with this MAC address.

3.3 LAN

Choose menu “**LAN**”, you can see the submenus under the main menu: **LAN Settings** and **DHCP Client List**. Click any of them, and you will be able to configure the corresponding function. The detailed explanations for each submenu are provided below.



3.3.1 LAN Settings

LAN Settings

DHCP Client List

Settings

IP Address

192.168.1.1

Subnet Mask

255.255.255.0

The Gateway acts as DHCP Server

☒ Enabled

IP Pool Starting Address

192.168.1.2

IP Pool Ending Address

192.168.1.200

Lease Time

Eight hours

DNS Proxy

☒ Enabled

OK

Cancel

Settings

IP Address	Enter the IP Address for the LAN of the Router, the formal is in dotted-decimal notation(the factory default value is 192.168.1.1)
Subnet Mask	Enter the subnet mask for the LAN of the Router, this address code determines the size of the network. Normally use 255.255.255.0 as the subnet mask.
The Gateway acts as DHCP Server	Enable or disable the DHCP server. If you disable the server, you must have another DHCP server within your network or else you must manually configure the computer.
IP Pool Starting Address	This field specifies the first address in the IP address pool.
IP Pool Ending Address	This field specifies the end address in the IP address pool.
Lease Time	This is the amount of time in which a network user will be allowed connection to the router with their current dynamic IP address. Please select the amount of time.
DNS Proxy	Select it or not to configure this parameter.

Note:

If you change the IP address of the LAN, you must use the new IP address to login to the router.

3.3.2 DHCP Client List

DHCP (Dynamic Host Configuration Protocol): A protocol used to obtain the information necessary for operation in an Internet Protocol network. This protocol reduces system administration workload, allowing devices to be added to the network with little or no manual intervention.

DHCP Client List: Allow you to see which clients are connected to the Router via host name, IP address, MAC address and Remaining Time. You can select static to fix it.

LAN Settings

DHCP Client List

DHCP Client List

Host Name	IP Address	MAC Address	Remaining Time	Static
eng7	192.168.1.15	00:0E:A6:03:0D:44	00:00:00	<input checked="" type="checkbox"/>

Refresh

Static Client Configuration

Host Name

eng7

IP Address

192.168.1.15

MAC Address (XX:XX:XX:XX:XX:XX)

00:0E:A6:03:0D:44

Add

OK

Cancel

DHCP Client List	
Host Name	This field displays the host name of the DHCP client.
IP Address	This field displays the IP Address that the router has allocated to the DHCP client.
MAC Address	This field displays the MAC address of the DHCP client.
Remaining Time	This field displays the time of the DHCP client leased. Before the time is up, DHCP client will request to renew the lease automatically.
Static	You can select static to fix the above information.

To add a reserved IP address:

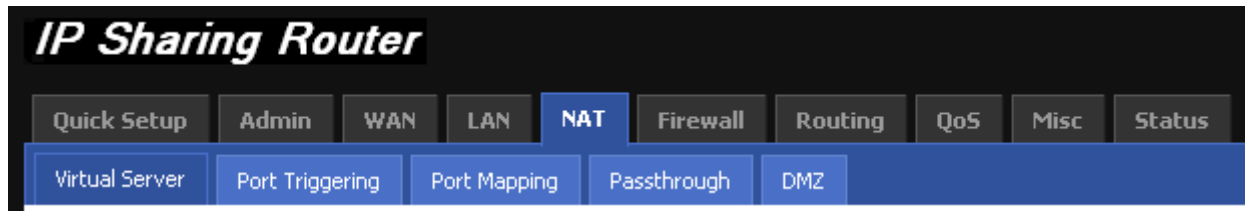
Step 1: Enter the Host Name, IP Address, MAC Address as shown in the screen.

Step 2: Click **"Add"** button to execute.

3.4 NAT

Choose menu “**NAT**”, you can see the submenus under the main menu: **Virtual Servers**, **Port Triggering**, **Port Mapping**, **Passthrough**, and **DMZ**.

Click any of them, and you will be able to configure the corresponding function. The detailed explanations for each submenu are provided below.



3.4.1 Virtual Server

Virtual Server: Allow you to set up public services on your network, such as web servers, ftp servers, e-mail servers, or other specialized Internet applications. Specialized Internet applications are any applications that use Internet access to perform functions such as videoconferencing or online gaming. When users send this type of request to your network via the Internet, the router will forward those requests to the appropriate PC.

Virtual Server

Port Triggering

Port Mapping

Passthrough

DMZ

Settings

Enabled

☐

Private IP

192.168.1.

Private Port

Public Port

Type

TCP

Comment

Add

Modify

Rules Listing

1/20(using/max)

Comment	Private IP	Private Port	Public Port	Action
<input checked="" type="checkbox"/>	192.168.1.16	50	tcp/udp 55	

OK

Cancel

Settings	
Enabled	Enabled means that the virtual server entry will take effect.
Private IP	This field displays the private IP address of the PC running the service application.
Private Port	This field displays the private port of the PC running the service application.

Public Port	To specify the extranet port used by the virtual server
Type	This displays the protocol used for public ports range, either TCP , UDP , Both .
Comment	It is the option, and you can enter some notes or not.

To add/modify a virtual server entry, you can enter the above information, then click **Add/Modify** directly.

Note:

If you set the virtual server of the service port as 80, you must set the web management port on Admin—Remote Management screen to be any value except 80 such as 8080. Or else there will be conflict to a disable the Virtual server.

3.4.2 Port Triggering

Port Triggering: Allow you to do port forwarding without setting a fixed PC. By setting Port Triggering rules, you can allow inbound traffic to arrive at a specific LAN host, using ports different than those used for the outbound traffic. This is called port triggering since the outbound traffic triggers to which ports inbound traffic is directed.

Some applications require multiple connections, like Internet games, video conferencing, Internet calling and so on. These applications cannot work with a pure NAT router. Port Triggering is used for some of these applications that can work with an NAT router.

Virtual Server
Port Triggering
Port Mapping
Passthrough
DMZ

Settings

Enabled ☒

Trigger Port ~

Trigger Type TCP

Public Port ~

Type TCP

Comment

Add Modify



Rules Listing 1/10(using/max)

Comment	Trigger Port	Public Port	Action
<input checked="" type="checkbox"/>	tcp/udp 55-60	tcp 65-70	

OK Cancel

Settings	
Enabled	Enabled means that the rule will take effect.
Trigger Port	This displays the port for outgoing traffic. An outgoing connection using this port will “Trigger” this rule.
Trigger Type	This displays the protocol used for Trigger Ports, either TCP, UDP, Both .
Public Port	This displays the port range used by the remote system, they are used for responding to the outgoing request. A response using one of these ports will be forwarded to the PC that triggered this rule.
Type	This displays the protocol used for public ports range, either TCP, UDP, Both .
Comment	It is the option, and you can enter some notes or not.

To add/modify a port triggering entry, you can enter the above information, and then click **Add/Modify** directly.

In the rules listing, you can click the icon  or  to edit or delete. It would be high light to yellow, and the detailed information displays on the Settings screen.

Settings

Enabled

☒

Trigger Port

55 ~ 60

Trigger Type

Both ▼

Public Port

65 ~ 70

Type

TCP ▼



Comment

Add

Modify

Rules Listing

1/10(using/max)

Comment	Trigger Port	Public Port	Action
<input checked="" type="checkbox"/>	tcp/udp 55-60	tcp 65-70	 

OK

Cancel

3.4.3 Port Mapping

Port Mapping: Allow you to set up public services on your network, such as web servers, ftp servers, e-mail servers, or other specialized Internet applications. Specialized Internet applications are any applications that use Internet access to perform functions such as videoconferencing or online gaming. When users send this type of request to your network via the Internet, the router will forward those requests to the appropriate PC.

Virtual Server
Port Triggering
Port Mapping
Passthrough
DMZ

Settings

Enabled
☐

Comment

Server IP
192.168.1.

Mapping Ports (port1, port2, port3-port4...)
Type
TCP

Add
Modify

Rules Listing
1/10(using/max)

Comment	Server IP	Mapping Ports	Action
<input checked="" type="checkbox"/>	192.168.1.25	tcp/udp 23,24,25	

OK
Cancel

To add/modify a port Mapping entry, you can enter the above information, and then click **Add/Modify** directly.

In the rules listing, you can click the icon or to **edit** or **delete**. It would be high light to yellow, and the detailed information displays on the Settings screen.

Settings

Enabled
☒

Comment

Server IP
192.168.1.25

Mapping Ports (port1, port2, port3-port4...)
Type
Both

Add
Modify

Rules Listing
1/10(using/max)

Comment	Server IP	Mapping Ports	Action
<input checked="" type="checkbox"/>	192.168.1.25	tcp/udp 23,24,25	

OK
Cancel

3.4.4 Passthrough

VPN: Some applications require an application level gateway through the router.

FTP: If the FTP server is using a non-standard FTP port number, this can prevent FTP data connections from being established.

NetMeeting: To accept the connection request from any outside NetMeeting client, the virtual server for H.323/ Netmeeting] must be enabled

Virtual Server	Port Triggering	Port Mapping	Passthrough	DMZ
VPN				
PPTP passthrough			<input checked="" type="checkbox"/>	
Ipssec passthrough			<input checked="" type="checkbox"/>	
L2TP passthrough			<input checked="" type="checkbox"/>	
FTP				
Non-Standard FTP Port (0-65535)			<input type="text"/>	
NetMeeting				
H323/Netmeeting passthrough			<input checked="" type="checkbox"/>	

3.4.5 DMZ

DMZ (DeMilitarized Zone): Allow one local user to be exposed to the Internet for use of a special-purpose service such as Internet gaming or videoconferencing. It forwards all the ports at the same time to one PC. The Port Forwarding feature is more secure because it only opens the ports you want to have opened, while DMZ hosting opens all the ports of one computer, exposing the computer so the Internet can see it.

Virtual Server
Port Triggering
Port Mapping
Passthrough
DMZ

Settings

Enabled ☒

Public IP Address 0.0.0.0

IP Address of Virtual DMZ Host 192.168.1.
☐ Get current LAN IP automatically

Add Modify

Rules Listing 1/6(using/max)

Public IP Address	IP Address of Virtual DMZ Host	Action
0.0.0.0	192.168.1.15	

OK Cancel

To add/modify a DeMilitarized Zone entry, you can enter the above information, and then click **Add/Modify** directly.

In the rules listing, you can click the icon or to edit or delete. It would be high light to yellow, and the detailed information displays on the Settings screen.

Settings

Enabled ☒

Public IP Address 0.0.0.0

IP Address of Virtual DMZ Host 192.168.1.15
☐ Get current LAN IP automatically

Add Modify

Rules Listing 1/6(using/max)

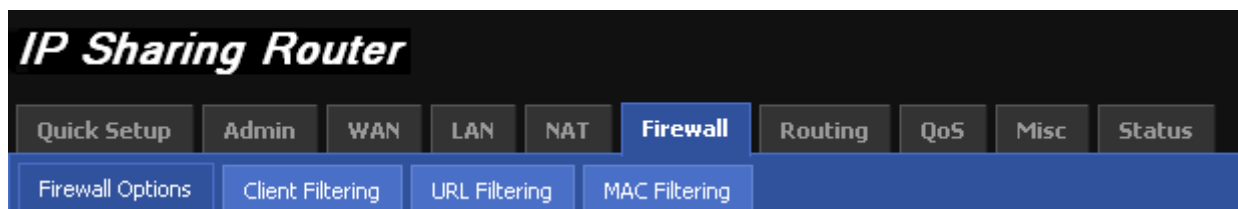
Public IP Address	IP Address of Virtual DMZ Host	Action
0.0.0.0	192.168.1.15	

OK Cancel

3.5 Firewall

Originally, the term firewall referred to a construction technique designed to prevent the spread of fire from one room to another. The network term "firewall" is a system or group of systems that enforces an access-control policy between two networks. It may also be defined as a mechanism used to protect a trusted network from an untrusted network. Of course, firewalls cannot solve every security problem. A firewall is one of the mechanisms used to establish a network security perimeter in support of a network security policy. It should never be the only mechanism or method employed. For a firewall to guard effectively, you must design and deploy it appropriately. This requires integrating the firewall into a broad information-security policy. In addition, specific policies must be implemented within the firewall itself.

Choose menu "Firewall", you can see the submenus under the main menu: **Firewall Option**, **Client Filtering**, **URL Filtering**, and **MAC Filtering**.



Click any of them. And you will be able to configure the corresponding function. The detailed explanations for each submenu are provided below.

3.5.1 Firewall Options

Firewall: Prevent Network Attack. It can protect your network to prevent hackers attack. In this page, you can configure the functions below to protect the router from being attacked.

Firewall Options
Client Filtering
URL Filtering
MAC Filtering

Settings

Enabled ☒

Options

Discard PING from WAN side <input type="checkbox"/>	IP Spoofing <input checked="" type="checkbox"/>
Deny PING to the Gateway <input type="checkbox"/>	Smurf Attack <input checked="" type="checkbox"/>
Detection Port Scan Packets <input checked="" type="checkbox"/>	Ping of Death <input checked="" type="checkbox"/>
Deny to Scan Security Port (113) <input checked="" type="checkbox"/>	Land Attack <input checked="" type="checkbox"/>
Discard NetBios Packets <input type="checkbox"/>	Snork Attack <input checked="" type="checkbox"/>
Deny Fragment Packets <input type="checkbox"/>	UDP Port Loop <input checked="" type="checkbox"/>
Disable ICMP Packets When Error is Encountered <input type="checkbox"/>	TCP Null Scan <input checked="" type="checkbox"/>
	TCP Syn Flood <input type="checkbox"/>
	Syn Threshold <input type="text" value="300"/> packets per second (1-3000)

OK

Cancel

IP Spoofing: If you select this option, the Router will monitor whether the packets from the particular region is doing IP deceive. In the event, the Router will start up the blocking function immediately. Note: The function takes effect only when the Region is LAN.

Land Attack: This is an attack combining Flood attack and IP spoofing. When the attackers send the spoof SYN datagram which including the casualty's IP address and make it the destination and source IP address, the LAND attack happens. And the Router will start up the blocking function immediately.

TCP Syn Flood: During a second, if a particular port of a destination IP addresses receives many TCP SYN packets, and the number of these packets exceeds the prescript value, then the Port will be deemed to suffering from SYN Flood Attack. And the Router will start up the blocking function immediately.

3.5.2 Client Filtering

Client Filter: Allow you to block Internet access for local clients based on IP addresses, application types, (i.e., HTTP port), and time of day.

Firewall Options

Client Filtering

URL Filtering

MAC Filtering

Settings

Enable Client Filter

☒

Enable

☐

IP Address

192.168.1. ~

Port

~

Type

TCP

Block Time

☐ Always ☐ Block

Day

☐ SUN ☐ MON ☐ TUE ☐ WED ☐ THU ☐ FRI ☐ SAT

Time

Always ~ Always

Comment

Rules Listing

0/10(using/max)

IP Address

PortType

Block Time

Comment

Action

3.5.3 URL Filtering

URL Filter: allowing you to prevent users from accessing specified websites on the basis of some policy.

The method of MAC Address Control has three options: Disable URL Filter function; Deny Internet access for the following URL addresses; Allow Internet access for the following URL addresses.

Firewall Options
Client Filtering
URL Filtering
MAC Filtering

Settings

URL Filter Control
Deny Internet access for the following URL addresses

IP Address
192.168.1. ~

URL filter string



Enable
☐

Add
Modify

Rules Listing
0/10(using/max)

IP Address	URL filter string	Action
------------	-------------------	--------

OK
Cancel

To add/modify a URL Filter entry, you can enter the above information, and then click **Add/Modify** directly. In the rules listing, you can click the icon  or  to edit or delete. It would be high light to yellow, and the detailed information displays on the Settings screen.

3.5.4 MAC Filtering

MAC Address Filter: The MAC address filter enables you to allow or restrict specified nodes from communicating with other nodes. Its feature allows you to control access to the Internet by users on your local network based on their MAC addresses.

The method of MAC Address Control has three options: Disable MAC Address Control function; Deny Internet access for the following MAC addresses; Allow Internet access for the following MAC addresses.

Firewall Options

Client Filtering

URL Filtering

MAC Filtering

Settings

MAC Address Control

Allow Internet access for the following MAC addresses ▾

MAC Address (XX:XX:XX:XX:XX:XX)

Comment

Add

Modify

Rules Listing

0/20(using/max)

MAC Address	Comment	Action
-------------	---------	--------

OK

Cancel

MAC Address: This is the PC's MAC address which is controlled by the rule, its format is XX:XX:XX:XX:XX:XX (X is any hexadecimal digit).

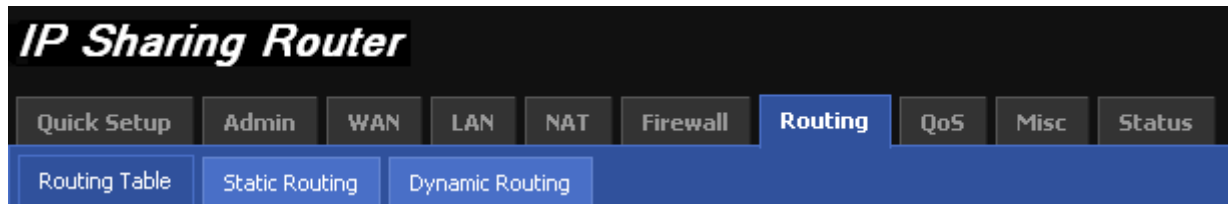
To add/modify a MAC Address Filter entry, you can enter the above information, and then click **Add/Modify** directly.

Note:

Before adding a MAC Address Filtering entry, you should enable the Firewall and the MAC Address Filtering function first.

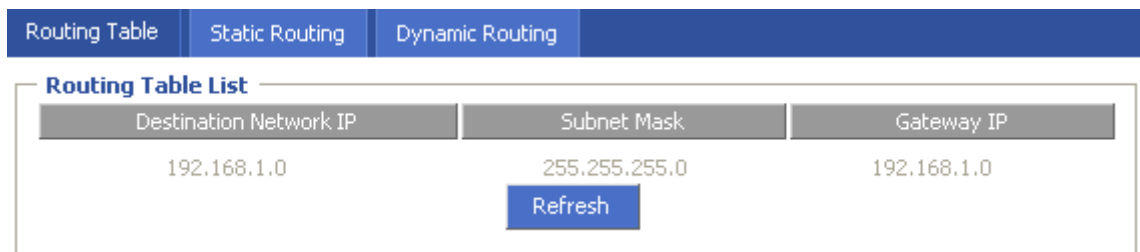
3.6 Routing

Choose menu “**Routing**”, you can see the submenus under the main menu: **Routing Table**, **Static Routing**, **Dynamic Routing**.



3.6.1 Routing Table

The routing table displays the current routing information in system.



Routing Table List

Destination Network IP	It is the address of the network or host that you want to assign to a route
Subnet Mask	It determines which portion of an IP address is the network portion, and which portion is the host portion
Gateway IP	This is the IP address of the gateway device that allows for contact between the router and the network of host.

3.6.2 Static Routing

A static route is a pre-determined pathway that network information must travel to reach a specific host or network. (For example: Destination Network IP: 192.168.100.1, Subnet Mask: 255.255.255.0, Gateway IP: 192.168.1.2)

Choose menu “**Static Routing**”, you can configure the static route in the next screen. A static route is a pre-determined path that network information must travel to reach a specific host or network.

Routing Table

Static Routing

Dynamic Routing

Static Routes Configuration

Destination Network IP

Subnet Mask

Gateway IP

Add

Modify

Destination Network IP	Subnet Mask	Gateway IP	Action
------------------------	-------------	------------	--------

OK

Cancel

Static Routes Configuration	
Destination Network IP	It is the address of the network or host that you want to assign to a static route
Subnet Mask	It determines which portion of an IP address is the network portion, and which portion is the host portion
Gateway IP	This is the IP address of the gateway device that allows for contact between the router and the network of host.

To add / Modify a static routing entry:

Step 1: Click **Add / Modify** button, you will see a new screen as the below.

Step 2: Enter the appropriate Destination IP Address, Subnet Mask and Default Gateway, and then select the status

Step 3: Click **OK** to make the entry take effect.

3.6.3 Dynamic Routing

Dynamic Routing can be used to cache routes learned by routing protocols, thus allowing the automation of static routing maintenance. The router, using the RIP (Routing Information Protocol) protocol, determines the network packet's route based on the fewest number of hops between the source and the destination. In the working mode, router stands for normal rip router. Default gateway stand for router announces default route on both sides. The rip function is workable only when WAN mode was set to Static IP or DHCP.

Routing Table	Static Routing	Dynamic Routing
Dynamic Routing		
Enable Dynamic Routing	<input checked="" type="checkbox"/>	
Working Mode	Router	
Listen Mode	Disabled	
Supply Mode	Disabled	
<div> <div>OK</div> <div>Cancel</div> </div>		

Dynamic Routing	
Enable Dynamic Routing	Click the radio button to configure this feature.
Working Mode	Router / Default Gateway
Listen Mode	Disable / RIP1 / RIP2 / Both(RIP1+RIP2)
Supply Mode	Disable / RIP1 / RIP2(Broadcast) / RIP2(Multicast)

3.7 QoS

In this page, you can indicate the function of Rate Control enable or not.

Rate control: The relationship between bandwidth: 1KBps=8Kbps;1Mbps=1000Kbps

Total(upload/download)bandwidth: Please fill in the suitable value you apply for, if not clear, please ask your ISP for help.

Mode: Separated into “**Independent / Share**”. Independent means every port has its own upload and download bandwidth, share means address or port share upload and download bandwidth.

Upload/Download: You can configure the upload and download bandwidth.

Rate Control

Settings

Enable Rate Control

☒

Total upload bandwidth

KBps

Total download bandwidth

KBps

Enable Rule

☐

IP Address

192.168.1. ~

Mode

Independent

Upload

KByte

Download

KByte

Add

Modify

Rules Listing



0/10(using/max)

IP Range	Mode	upload (max)	download (max)	Action
----------	------	--------------	----------------	--------

OK

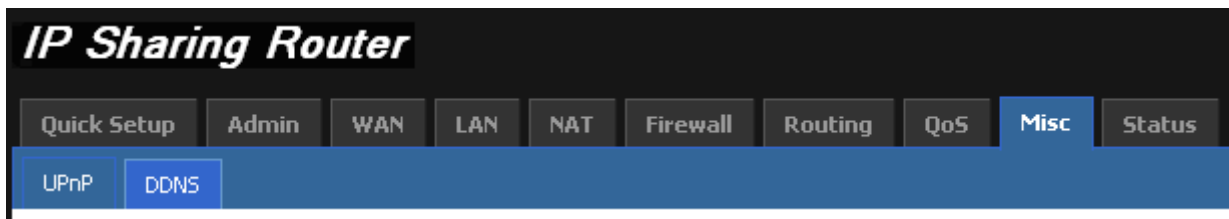
Cancel

To add/modify a Rate Control entry, you can enter the above information, and then click **Add/Modify** directly.

In the rules listing, you can click the icon  or  to edit or delete. It would be high light to yellow, and the detailed information displays on the Settings screen.

3.8 Misc

Choose menu “**Misc**”, you can see the submenus under the main menu: **UPnP**, **DDNS**.



3.8.1 UPnP

UPnP (Universal Plug and Play) allows automatic discovery and configuration of equipment attached to your LAN. UPnP is supported by Windows ME, XP, or later. It provides compatibility with networking equipment, software and peripherals of the over 400 vendors that cooperate in the Universal Plug and Play forum.

In this page, you can view the information about UPnP in the screen. You can click **Refresh** to update the Current UPnP Settings List before the information

If you want to use the Router’s UPnP function, please select the checkbox “**Enabled**”. If you don’t want use the function, please not choose it. Allowing the function may cause a risk to security, this feature is disabled default.

External Port: This displays the external port, which the router opened for the application,

Internal Port: This displays the Internal port, which the router opened for local host.

Protocol: This displays the protocol for the application.

Description: This displays the description provided by the application in the UPnP request.

 The screenshot shows the 'UPnP Settings' dialog box. At the top, there are two tabs: 'UPnP' and 'DDNS'. The 'UPnP' tab is selected. Below the tabs, the settings are as follows:

- 'Enable UPnP' is checked, with the text 'Enabled' next to it.
- 'Advertise Time (60-1800)' is set to '1800' in a text input field.
- 'Refresh Port Mapping' has a blue 'Refresh' button next to it.

 Below these settings is a table with the following headers: 'Remote Host', 'External Port', 'Internal Client', 'Internal Port', 'Protocol', and 'Description'. The table is currently empty. At the bottom of the dialog box, there are 'OK' and 'Cancel' buttons.

3.8.2 DDNS

DDNS (Dynamic DNS) provides you on the Internet with a method to tie their domain name to a computer or server. DDNS allows your domain name to follow your IP address automatically by having your DNS records changed when your IP address changes. It is useful when you are hosting your own website, FTP server, or other server behind the router.

The DNS Server have six providers: **no-ip.com**; **dyndns.org**; **changeip.com**; **regfish.com**; **www.oray.net**; **members.3322.org**

To set up for DynDNS DDNS, follow these instructions:

Step 1: Click the radio button to enable DDNS.

Step 2: Type the “**Host Name**” “**User Name**” “**Password**” for your DDNS account.

Step 3: Select the DDNS Server provider

Step 4: Enter the time of DDNS Update Interval, and click “**OK**”

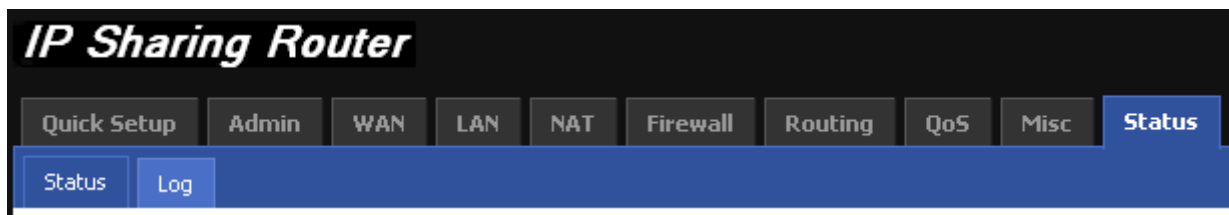
The screenshot shows a web interface for configuring DDNS. At the top, there are two tabs: 'UPnP' and 'DDNS', with 'DDNS' being the active tab. Below the tabs is a 'Settings' section. It contains the following fields:

- Enable DDNS:** A checkbox that is checked, with the text 'Enabled' next to it.
- Host Name:** An empty text input field.
- DDNS Server:** A dropdown menu with 'dyndns.org' selected.
- User Name:** An empty text input field.
- Password:** An empty text input field.
- DDNS Update Interval:** A text input field containing '0', followed by the text '(0-86400)Minutes'.

At the bottom of the window, there are two buttons: 'OK' and 'Cancel'.

3.9 Status

Choose menu “**Status**”, you can see the submenus under the main menu: **Status**, **Log**.



3.9.1 Status

Choose “**Status**” menu, you can view the router's current status and configuration. It includes Gateway / Internet / Information. This screen displays the network All information is read-only.

Status		Log	
Gateway		Internet	
IP Address	192.168.1.1	Cable/DSL	Disconnected
Subnet Mask	255.255.255.0	IP Address	0.0.0.0
DHCP Server	Enabled	Subnet Mask	0.0.0.0
NAT	Enabled	Gateway	0.0.0.0
Firewall	Enabled	DNS	0.0.0.0
Information		Secondary DNS	0.0.0.0
System Up Time	00:40:10	Domain Name	
System Date	Thu Jan 01 08:40:10 1970	Connection Type	Static IP
Connected Clients	0	Connection Time	00:00:00
Firmware Version	1.0.0		
LAN MAC Address	00:00:00:00:00:01		
WAN MAC Address	00:00:00:00:00:02		

3.9.2 Log

In this screen, you can view the logs of the Router.

The log file keeps a running log of events and activities occurring on the device. You can query the logs to find what happened to the router. When the device is rebooted, the logs are automatically cleared.

Click the **Refresh** button to refresh the logs.

Click the **Clear** button to clear the logs.

Click the **Download** button to load the logs.

When you click the **Settings** button, the page will turn to “**Admin—Log Settings**”.

[Status](#)
[Log](#)

System Log

[First Page](#)
[Prev Page](#)
[Next Page](#)
[Last Page](#)

No.	Time	Record
1	Thu Jan 01 08:00:00 1970	[System]System start
2	Thu Jan 01 08:00:00 1970	[System]Ver 1.0.0 #13 Tue Sep 22 14:33:54 2009
3	Thu Jan 01 08:00:52 1970	[DHCP5]RX DISCOVER by 00:0E:A6:03:0D:44
4	Thu Jan 01 08:00:52 1970	[DHCP5]TX OFFER of 192.168.1.15
5	Thu Jan 01 08:00:52 1970	[DHCP5]RX REQUEST by 00:0E:A6:03:0D:44
6	Thu Jan 01 08:00:52 1970	[DHCP5]TX ACK to 192.168.1.15
7	Thu Jan 01 08:01:18 1970	[DHCP5]RX INFORM by 192.168.1.15

[Download](#)
[Clear](#)
[Settings](#)
[Refresh](#)

Appendix A: Specifications

Product specifications		
MAC Address Table	1K	
Memory	512K Flash, 2 MB SDRAM	
Standards and Protocols	IEEE 802.3, IEEE 802.3u, IEEE 802.3x, TCP/IP, DHCP, ICMP, NAT, PPPoE, SNTP, HTTP, DNS	
Basic Function	DHCP Client and Server; MAC Address Modify / Clone, VPN Pass-through, Static Routing, Dynamic DNS, IP Sharing, UPnP	
Ports	LAN	4*10/100 Mbps Auto-Negotiation RJ 45 ports(Auto MDI/MDIX)
	WAN	1*10/100 Mbps Auto-Negotiation RJ 45 port(Auto MDI/MDIX)
QoS	“Independent / Share” bandwidth control for IP	
NAT Function	Virtual Server, Special Application, DMZ Host, Port Mapping, Port Triggering	
Firewall Function	IP Address Filtering, MAC Address Filtering, Domain Name Filtering, IP/MAC Address Binding, Ignore Ping Packet From WAN Port, DoS, Scan Protection, IP Packets Containing Options, Suspicious Package Detection	
System Function	Remote Management, System Log, Configuration File Uploading and Downloading, Web based Upgrade, HTTPS Configuration	
Electrical & Emissions Summary		
Safety	RoHS	
Emissions	FCC, CE, VCCI Class B	
Power Supply	External power adapter 5V 1A	
Physical Specifications		
Dimensions	98 mm*74.7 mm*29 mm	
Temperature	Operating: 0~40℃ (32~104°F),	Storage: -10℃ ~ 70℃ (14°~158°F)
Humidity	Operating: 10% ~ 90% (non-condensing)	Storage: 5%~90% RH, non-condensing

Appendix B: Glossary

- **DDNS** (Dynamic Domain Name System) – The capability of assigning a fixed host and domain name to a dynamic Internet IP Address.
- **DHCP** (Dynamic Host Configuration Protocol) – A protocol that automatically configure the TCP/IP parameters for the all the PCs that are connected to a DHCP server.
- **DMZ** (Demilitarized Zone) – A Demilitarized Zone allows one local host to be exposed to the Internet for a special-purpose service such as Internet gaming or videoconferencing.
- **DNS** (Domain Name Server) – An Internet Server that translates the names of websites into IP addresses.
- **Domain Name** – A descriptive name for an address or group of addresses on the Internet.
- **DoS** (Denial of Service) – A hacker attack designed to prevent your computer or network from operating or communicating.
- **DSL**(Digital Subscriber Line) – A technology that allows data to be sent or received over existing traditional phone lines.
- **ISP**(Internet Service Provides) – A company that provides access to the Internet
- **MTU**(Maximum Transmission Unit) – The size in bytes of the largest packet that can be transmitted.
- **NAT**(Network Address Translation) – NAT technology translates IP addresses of a local area network to a different IP address for the Internet.
- **PPPoE**(Point to Point Protocol over Ethernet) – PPPoE is a protocol for connecting remote hosts to the Internet over an always-on connection by simulating a dial-up connection.